UNITED STATES PATENT AND TRADEMARK OFFICE

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10/593,967	08/06/2007	Michael Francis Gilligan	8235.005.PCUS00	7091

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NOVAK DRUCE + QUIGG LLP
1300 EYE STREET NW
SUITE 1000 WEST TOWER
WASHINGTON, DC 20005

EXAMINER
NIQUETTE, ROBERT R

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _06 August 2007_.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under _Ex parte Quayle_, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-36_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-36_ is/are rejected.

7)☒ Claim(s) _7 and 16_ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _06 August 2007_ is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Status of Claims

This action is in reply to the application filed on 8-6-2007.

Claims 1- 36 are currently pending and have been examined.

Priority

Acknowledgment is made of applicant's claim for a domestic priority date of 3-22-2005. The certified copy has been filed in Application No. 3-22-2005.

Claim Objection – Minor Informalities

Claims 7 and 16 are objected to as having no agreement in number between subject and verb.

As to claim 7, it reads in pertinent part, "the calculated asset return DISTRIBUTIONS IS based on..." Examiner believes it should read either, "the calculated asset return distributions ARE based on...," or, "the calculated asset return DISTRIBUTION is based on..."

Claim 16 appears to have the same situation. It reads, "...the expected RETURNS generated in a period also INCLUDES..."

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 23 ends in the phrase, "...such as." This is indefinite language and correction (or explanation) is solicited.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-36 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Based on Supreme Court precedent, a proper process must be tied to another statutory class or transform underlying subject matter to a different state or thing (*Diamond v. Diehr,* 450 U.S. 175, 184 (1981); *Parker* v. *Flook,* 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson,* 409 U.S. 63, 70 (1972); *Cochrane* v. *Deener,* 94 U.S. 780,787-88

(1876)).Since neither of these requirements is met by the claim, the method is not considered a patent eligible process under 35 U.S.C. 101. To qualify as a statutory process, the claim should positively recite the other statutory class to which it is tied, for example by identifying the apparatus that accomplished the method steps or positively reciting the subject matter that is being transformed, for example by identifying the material that is being changed to a different state. The claims fail to tie the method to another statutory class (e.g. computer).

Amendment to add a tie to another statutory category of invention, such as a machine (e.g., computer) which performs a substantive method step is recommended to resolve the rejection under 35 U.S.C. 101.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John.Deer & Co.*, 383 U.S. 1,148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

2. Ascertaining the differences between the prior art and the claims at issue.

3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-25 and 29-35 are rejected under U.S.C. Title 35, §103(a) as being unpatentable over US20040111350, *Charnley*, in view of US20050187849, *Bollapragada et al.*

As per claim(s) 1, *Charnley* teaches:

calculating an expected annualised asset return distribution for an asset over different holding periods of different length (At least paragraph(s) 9 and 52);

determining the expected accumulated return and associated risk of the investment using the results (At least paragraph(s) 9 and 25-27).

Charnley does not disclose sampling the expected annualised asset return distribution for the holding period substantially equal to the investment term to extract a single expected return on initial capital of the investment, however this is described by *Bollapragada* in at least the abstract and paragraph 29. It would have been prima facie obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of *Bollapragada* with those of *Charnley* since the claimed invention is a combination of old elements, and in the combination, each element would have performed the

same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

Bollapragada further teaches:

for expected returns generated in each period, sampling the expected annualised asset return distribution for a holding period substantially equal to the total of the remaining periods of the investment term to extract a single expected return on each return previously generated ((At least paragraph(s) 29 and abstract);

summing each of the sampling extractions and storing the result representing a single expected return for the investment (At least paragraph(s) 28 and 29);

repeating each of the sampling and summing steps (At least paragraph(s) 133).

As per claim(s) 6, *Charnley* recites:

different holding periods are each holding period progressively smaller than the first holding period by a period (At least paragraph(s) 13).

In reference to claim(s) 7, *Charnley* discusses:

the calculated asset return distributions is based on the observed past performance of the asset (At least paragraph(s) 37, claim 1 and abstract).

Regarding claim(s) 8, *Charnley* discloses:

the determined expected accumulated return of the portfolio is used to calculate

expected accumulated wealth distribution of the investment (At least paragraph(s) 4 and

13).

With respect to claim(s) 9, *Bollapragada* describes:

sampling the expected annualised asset return distribution for a holding period

comprises sampling the expected annualised asset return distribution a number of times

equal to the number of periods within that holding period (At least paragraph(s) 29 and

30).

Concerning claim(s) 10, *Charnley* teaches:

the investment is a superannuation investment or an investment in a managed fund

(At least paragraph(s) 2).

As to claim(s) 11, *Charnley* recites:

wherein the method further comprises also determining the expected accumulated

return and associated risk of an investment over a smaller investment term also com-

prised of periods by performing the sampling, summing, repeating and determining

steps of the method using a smaller investment term as the investment term (At least

paragraph(s) 25-27).

As per claim(s) 12, *Bollapragada* discusses:

the expected return and associated risk of an investment is determined for each smaller investment term within the investment term, starting from a first smaller investment term substantially equal to a single period, then each term progressively larger than the first smaller investment term by a period (At least paragraph(s) 28 and 29).

With respect to claim(s) 13, *Charnley* discloses:

the investment includes capital contributions made for any period within the investment term (At least paragraph(s) 9).

In reference to claim(s) 14, *Bollapragada* describes:

the method further comprises for each contribution made in a period, sampling the expected annualised asset return distribution for a holding period substantially equal to the total of the remaining periods of the investment term to extract a single expected return on each contribution (At least paragraph(s) 28 and 29).

With respect to claim(s) 15, *Charnley* teaches:

the expected return generated in a period is the total of the expected returns generated in that period from the initial capital and the expected returns generated in that same period from any returns previously generated (At least paragraph(s) 2 and 9).

Regarding claim(s) 16, *Charnley* recites:

the expected returns generated in a period also includes the expected returns gen-

erated in that same period from contributions made (At least paragraph(s) 2 and 9).

In reference to claim(s) 17, *Charnley* discusses:

the investment is comprised of one or more assets and proportions of the invest-

ment divided into the different assets represent a strategic asset allocation of the in-

vestment wherein the step of calculating expected annualised asset return distribution

for an asset is performed for each asset that is included in the strategic asset allocation

of the investment (At least paragraph(s) 3, 4, 7 and 11).

Concerning claim(s) 18, *Charnley* discloses:

after extracting a single expected return on initial capital for each asset, the method

further comprises combining the expected returns for each asset according to each as-

set's weight allocation within the strategic asset allocation to calculate a single expected

return on initial capital of the investment for that strategic asset allocation (At least

paragraph(s) 87).

As per claim(s) 19, *Charnley* teaches:

the investment has more than one asset, after extracting a single expected asset

return on each previously generated return for each asset, the method further com-

prises combining the expected return on each previously generated return of each asset

according to each asset's weight allocation within the strategic asset allocation to calcu-

late a single expected return on each return previously generated for that strategic asset allocation (At least paragraph(s) 87).

In reference to claim(s) 20, *Bollapragada* recites:

the method is repeated based on different strategic asset allocations for the investment (At least paragraph(s) 133).

Regarding claim(s) 21, *Charnley* discusses:

an actual strategic asset allocation for the investment is chosen for the investor by comparing the expected accumulated return and wealth and associated risk of an investment as determined for each strategic asset allocation (At least paragraph(s) 29).

With respect to claim(s) 22, *Charnley* discloses:

the asset return distribution is derived from standard market indices or a subset of standard indices selected on the basis of parameters such a price to book value, sectoral bias or other 'active' tilts (At least paragraph(s) 2-4).

Concerning claim(s) 23, *Bollapragada* describes:

the step of using the results to determine the expected accumulated wealth and associated risk of an investment comprises graphically representing the results, such as (At least paragraph(s) 248).

As per claim(s) 24, *Charnley* teaches:

the associated risk of an investment is determined based on the spread of ex-

pected wealth determined by the method (At least paragraph(s) 9, 11 and 13).

In reference to claim(s) 25, *Charnley* recites:

calculating an expected annualised return for an asset derived from an estimated

risk premium for that asset (At least paragraph(s) 9, 11 and 13);

calculating a representative annualised return distribution for an asset over the different

holding periods (At least paragraph(s) 9-11);

for each representative annualised return distribution, calculating the likelihood of de-

grees of variation from a central tendency (At least paragraph(s) 9-11, 24 and 26); and

combining the expected annualised return for the asset and the variations calculated for

each holding periods into the distribution of expected annualised asset returns for hold-

ing period (At least paragraph(s) 18).

With respect to claim(s) 29, *Charnley* discusses:

the method further comprises determining the strategic asset allocation by selecting

a first asset, then selecting one or more other assets that most exploits the relationship

between return and risk of the investment to the investor's advantage (At least paragraph(s) 9).

In reference to claim(s) 30, *Charnley* discloses:

the method further comprises determining a strategic asset allocation for an investment fund having a plurality of investments, by:

determining a strategic asset allocation for each of the plurality of investments according to the method described above (At least paragraph(s) 43);

and determining a strategic asset allocation for the fund using an aggregate of the strategic asset allocation for each of the plurality of investments (At least paragraph(s) 43).

Regarding claim(s) 31, *Charnley* describes:

the method further comprises allowing the investor to amend their strategic asset allocation (At least paragraph(s) 43).

Concerning claim(s) 32, *Charnley* teaches:

allowing the investor to amend contributions or capital additions (At least paragraph(s) 3 and 4).

As per claim(s) 33, *Bollapragada* teaches:

A computer system to determine expected accumulated return and associated risk of an investment over an investment term according to the method described in claim 1 (At least paragraph(s) 282).

As to claim(s) 34, *Bollapragada* recites:

an asset datastore stores the expected annualised asset return distribution, a sample datastore to store a sum of each repeat of the sampling extractions and a processor to operate to perform the sampling steps of the method and to use the sample datastore to determine the expected return and associated risk of the investment (At least paragraph(s) 282).

Claims 26-28 are rejected under U.S.C. Title 35, §103(a) as being unpatentable over US20040111350, *Charnley*, in view of US20050187849, *Bollapragada et al*, and further in view of US20070192223, *Cifrese et al*.

Charnley and *Bollapragada et al* disclose the invention substantially as claimed. See the discussion above. They do not disclose the method further comprises collecting details on the investor and determining the strategic asset allocation for an investment based on the details of the investor; however this limitation is taught is at least paragraph 63 of *Cifrese*.

It would have been prima facie obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of *Cifrese* with those of *Charnley* and *Bollapragada* since the claimed invention is a combination of old elements, and in the combination, each element would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

Concerning claim(s) 27, *Cifrese* discloses:

the investor details are any one or more of the investor's age, expected membership duration, income, current investment capital with the fund, contributions amount, prospective capital additions and withdrawals, wealth objectives, risk tolerance for expected wealth, other major investments, taxation and other special circumstances (At least paragraph(s) 63).

Regarding claim(s) 28, *Cifrese* describes:

the method further comprises periodically recalculating the expected annualised return distributions (At least paragraph(s) 464).

Claims 2-5, 35 and 36 are a matter of design choice. The investment term equaling the investment life of the investment, each period being equal in length and equal to a year and the first holding period being equal to the investment term do not affect the performance of the invention.

Conclusion

The following prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

US 20050171883 A1   *Dundas, Doug R. et al.*

US 20040054612 A1   *Ocampo, Juan Manuel*

US 20040030628 A1   *Takamoto, Masanori et al.*

US 20030233301 A1   *Chen, Peng et al.*

US 20030195831 A1   *Feldman, Barry*

US 20030023533 A1   *Tan, Meng Ngee Philip*

US 20020123953 A1   *Goldfarb, Donald et al.*

US 20020103733 A1   *Barrington, Richard et al.*

US 20020077944 A1   *Bly, J. Aaron et al.*

US 7461021 B2   *Bergmann; Michael D. et al.*

US 7050998 B1   *Kale; Jivendra K. et al.*

US 6928418 B2   *Michaud; Robert et al.*

US 6275814 B1   *Giansante; Joseph E. et al.*

US 5987433 A   *Crapo; Andrew Walter*

US 20050192885 A1   *Horowitz, Robert V.*

US 7472084 B2   *Damschroder; James Eric*

US 6282520 B1	*Schirripa; Felix*
US 6021397 A	*Jones; Christopher L. et al.*
US 5884287 A	*Edesess; Michael*
US 5812987 A	*Luskin; Donald L. et al.*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert R. Niquette whose telephone number is 571-270-3613. The examiner can normally be reached on Monday through Thursday, 5:30 AM to 4:00 PM EDT.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Kyle can be reached on 571-272-6746. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, http://portal.uspto.gov/external/portal/pair. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Cus-

tomer Service Representative or access to the automated information system, call 800-

786-9199 (IN USA OR CANADA) or 571-272-1000.

   /Robert R. Niquette/
   Examiner, AU 3695
   8-31-2009

   /Charles R. Kyle/
   Supervisory Patent Examiner, Art Unit 3695